

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Original) A current transformer assembly comprising:

a current transformer having a core and a first coil in a flux inducing relationship with the core, the core including an opening defining a void configured to receive at least a second coil;

an insulation cup comprising a first part and a second part, the first part configured to mechanically couple to the second part such that the first part and the second part substantially encapsulate the current transformer, an interior portion of the insulation cup disposed between the core and void.
2. (Original) The current transformer assembly of claim 1, wherein the interior portion defines a complete periphery of the void.
3. (Original) The current transformer assembly of claim 2, wherein the interior portion is rounded.
4. (Original) The current transformer assembly of claim 1, wherein the interior portion includes an overlap portion defined by overlapping sections of the first part and the second part.

5. (Original) The current transformer assembly of claim 4, wherein the first part and second part includes complementary snap-fit features.
6. (Original) The current transformer assembly of claim 1, wherein the first part and second part includes complementary snap-fit features.
7. (Original) The current transformer assembly of claim 1, wherein:
the first part includes at least a first flexible tab having a first aperture;
the second part includes a first detent received by the first aperture.
8. (Original) A method of assembling a current transformer assembly comprising:
disposing a current transformer between a first part and a second part of an insulation enclosure, the current transformer having a core and a first coil in a flux inducing relationship with the core, the core including an opening defining a void configured to receive at least a second coil; and
mechanically coupling the first part to the second part to substantially encapsulate the current transformer such that an interior portion of the insulation enclosure is disposed between the core and void.
9. (Original) The method of claim 8 further comprising mechanically coupling the first part to the second part such that sections of the first part and the second part overlap.

10. (Original) The method of claim 8 further comprising mechanically coupling the first part to the second part such that sections of the first part and the second part overlap to form an overlapping interior portion of the insulation enclosure.

11. (Original) The method of claim 8 wherein mechanically coupling the first part to the second part further comprises snap-fitting features on the first and second part.

12. (Original) The method of claim 8, wherein mechanically coupling the first part to the second part further includes moving a first flexible tab of the first part over a first detent of the second part until a first aperture of the first part receives the first detent.

13. (Currently amended) An arrangement comprising:

a current transformer having a core and a first coil in a flux inducing relationship with the core, the core including an opening defining a void;

a first current coil passing through the void;

a second current coil passing through the void; ~~and~~

an insulation member disposed between the first current coil and the second current coil, the insulation member structurally separate from the first current coil and the second current coil; and

an insulation cup substantially encapsulating the current transformer such that the insulation cup provides a barrier within the void between the current transformer and the first coil and between the current transformer and the second coil.

14. (Original) The arrangement of claim 13 wherein the insulation member extends through the void, and has a width exceeding a width of the first current coil and a width of the second coil.
15. (Original) The arrangement of claim 13 wherein the current transformer is supported by a utility meter housing.
16. (Original) The arrangement of claim 15 wherein the insulation member is disposed on the utility meter housing.
17. (Original) The arrangement of claim 13 wherein each of the first current coil and second current coil includes an uninsulated conductor portion passing through the void.
18. (Original) The arrangement of claim 17 wherein said uninsulated conductor portion comprises a flat copper bar.
19. (Currently amended) The arrangement of claim 13, ~~further comprising:~~
~~— an wherein the insulation cup comprising comprises~~ a first part and a second part, the first part configured to mechanically couple to the second part such that the first part and the second part substantially encapsulate the current transformer.
20. (Currently amended) The arrangement of claim ~~13~~ 15, wherein the insulation member has a first end connecting to the utility meter housing and a second end opposite

the first end, wherein the insulation member extends through a hole defined by an interior portion of the insulation cup ~~the insulation member having a width at each point between the first end and the second end that is at least as wide as any other point that is closer to the second end.~~